

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**REVOCAION OF POWER OF ATTORNEY  
AND NEW POWER OF ATTORNEY BY ASSIGNEE  
AND CHANGE OF CORRESPONDENCE ADDRESS**

**NOKIA CORPORATION**, the Assignee of record hereby revokes all powers of attorney previously granted with respect to each of the United States patent applications identified in Schedule A attached hereto, and appoints the practitioners associated with the Customer Number provided below to prosecute the noted applications and to transact all business in the Patent and Trademark Office connected therewith, and directs that all correspondence be addressed to that Customer Number:

**Customer Number 10949**

with full power of substitution and revocation to transact all business in the Patent and Trademark Office in connection therewith.

Please direct telephone calls to the attention of:

Guy R. Gosnell  
Registration No. 34,610  
Tel Charlotte Office (704) 444-1000  
Fax Charlotte Office (704) 444-1111

**NOKIA CORPORATION**, the assignee of record, hereby elects under 37 C.F.R. § 3.71 to prosecute these patent applications and certifies that it is the assignee of the entire right, title, and interest in each United States patent application noted in Schedule A by virtue of an assignment from the inventor(s) to Nokia Corporation.

As required by 37 CFR 3.73(b)(1)(ii), the documentary evidence of the chain of title from the original owner to the assignee was submitted for recordation pursuant to 37 CFR 3.11, and the reel and frame numbers confirming recordation in the US Patent Office are provided in Schedule A.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the Assignee.

Assignee of Record:

**NOKIA CORPORATION**

By: 

Print Name: Thomas Arria

Title: Senior IPR Specialist

Date: 4/11/12

**CUSTOMER NO. 10949**

**ALSTON & BIRD LLP**

Bank of America Plaza

101 South Tryon Street, Suite 4000

Charlotte, NC 28280-4000

Tel Charlotte Office (704) 444-1000

Fax Charlotte Office (704) 444-1111

LEGAL01/13180529v2

SCHEDULE A  
Revocation of Power of Attorney and New Power of Attorney  
By Assignee Nokia Corporation

Nokia Ref.	Attorney Docket No.	Appl. No.	Filing Date	Conf. No.	Assignment Reel/Frame
17604-US-DIV	042933/417395	11/881,367	7/26/2007	1389	014385/0356-(Recorded in parent Appl. No. 10/421,629)
17623-US-CNT	042933/417396	11/408,908	4/21/2006	9810	013204/0473-(Recorded in parent Appl. No. 10/171,467)
17623-US-DIV	042933/417397	11/901,667	9/17/2007	6699	014507/0298-(Recorded in parent Appl. No. 10/459,126)
18786-US-CNT	042933/417398	12/862,240	8/24/2010	3651	016120/0739-(Recorded in parent Appl. No. 10/496,601)
19129-US-CNT	042933/417399	12/899,701	10/7/2010	6341	015290/0912-(Recorded in parent Appl. No. 10/763,805)
19460-US-PCT	042933/417400	10/516,887	7/25/2005	6812	017174/0670
19770-US-PCT	042933/417402	10/548,741	6/19/2006	4726	018021/0729
31695-US-PCT	042933/417403	12/086,730	10/23/2008	2649	021303/0633
32135-US-PCT	042933/417404	10/516,870	8/25/2005	2379	016058/0188
32154-US-PCT	042933/417405	10/530,952	12/15/2005	2243	016313/0610
32546-US-CNT[2]	042933/417406	11/453,791	6/14/2006	6786	012487/0487-(Recorded in parent Appl. No. 09/777,521) 018906/0442
33008-US-NP	042933/417407	10/187,393	6/27/2002	3451	013373/0858
33867-US-PCT	042933/417408	10/584,381	4/11/2007	1277	019242/0147
35592-US-CNT	042933/417409	10/781,325	2/17/2004	9454	012934/0016-(Recorded in parent Appl. No. 10/115,268)
35910-US-CIP	042933/417410	10/291,192	11/8/2002	2503	015179/0217
35949-US-NP	042933/417411	10/621,259	7/15/2003	9729	014503/0102
36003-US-NP	042933/417412	10/255,560	9/25/2002	1646	013711/0626
36416-US-CNT	042933/417413	12/803,098	6/17/2010	6026	015157/0543 016214/0041
36457-US-NP	042933/417414	10/782,372	2/18/2004	3558	015574/0165
36516-US-NP	042933/417415	10/854,765	5/26/2004	5937	015932/0380
36531-US-NP	042933/417416	10/602,540	6/23/2003	1200	014793/0040
36561-US-NP	042933/417417	10/656,886	9/4/2003	1554	014947/0715
36762-US-REI	042933/417418	13/411,189	3/2/2012	1400	015308/0324-(Recorded in parent Appl. No. 10/705,077)
37097-US-NP	042933/417419	10/746,843	12/24/2003	9210	015339/0994
37250-US-NP	042933/417422	11/015,755	12/16/2004	4222	015700/0477
37293-US-NP	042933/417423	10/692,290	10/23/2003	7122	014970/0234
37298-US-CNT	042933/417424	12/150,307	4/25/2008	5670	014970/0221-(Recorded in parent Appl. No. 10/692,291)
37298-US-NP	042933/417425	10/692,291	10/23/2003	4222	015700/0477
37379-US-NP	042933/417427	11/049,638	2/1/2005	7063	016664/0093
37692-US-NP	042933/417428	12/084,677	5/5/2008	1655	020946/0937

Signature: \_\_\_\_\_

Thomas Arria

Date: \_\_\_\_\_

**SCHEDULE A**  
**Revocation of Power of Attorney and New Power of Attorney**  
**By Assignee Nokia Corporation**

<b>Nokia Ref.</b>	<b>Attorney Docket No.</b>	<b>Appl. No.</b>	<b>Filing Date</b>	<b>Conf. No.</b>	<b>Assignment Reel/Frame</b>
41039-US-CNT	042933/417429	12/804,803	7/28/2010	1349	016173/0026-(Recorded in parent Appl. No. 11/039,058)
41627-US-PCT	042933/417430	12/227,313	2/18/2009	6491	022136/0839
42325-US-PCT	042933/417431	11/922,647	12/20/2007	7744	021015/0428
42722-US-PCT	042933/417432	10/560,675	2/23/2007	2319	020187/0821
43008-US-NP	042933/417433	10/782,399	2/18/2004	4342	014772/0120
43056-US-NP	042933/417434	10/668,105	9/22/2003	7632	014876/0767
43143-US-PCT	042933/417435	10/582,833	6/14/2006	6761	018002/0366
43315-US-NP	042933/417436	10/805,678	3/18/2004	8566	015663/0499
43496-US-CNT	042933/417437	12/459,138	6/25/2009	3296	014928/0896
43672-US-NP	042933/417438	11/129,655	5/13/2005	9878	016880/0279
43683-US-NP	042933/417439	10/875,079	6/23/2004	7893	015103/0979
43884-US-NP	042933/417440	11/063,664	2/22/2005	6687	016574/0554
43930-US-CNT	042933/417441	12/433,326	4/30/2009	8856	015104/0019-(Recorded in parent Appl. No. 10/841,888)
43930-US-NP	042933/417442	10/841,888	5/7/2004	2211	015104/0019
44032-US-CNT	042933/417444	13/240,499	9/22/2011	6174	020099/0269-(Recorded in parent Appl. No. 11/597,003)
44138-US-PCT	042933/417445	12/083,576	2/5/2009	1272	021413/0001
44156-US-NP	042933/417446	11/057,118	2/11/2005	2509	016215/0204
44183-US-CNT	042933/417448	12/924,456	9/27/2010	9678	016568/0609-(Recorded in parent Appl. No. 11/057,065)
44311-US-NP	042933/417449	11/107,334	4/15/2005	4541	016775/0074
44367-US-NP	042933/417450	10/806,023	3/22/2004	9971	014865/0148
44521-US-PCT	042933/417451	11/665,971	2/12/2008	2568	020157/0126
44723-US-NP	042933/417452	10/985,725	11/10/2004	4767	015700/0701
44842-US-PCT	042933/417453	11/988,184	5/22/2009	3458	022720/0669
44895-US-PCT	042933/417454	11/631,235	12/28/2006	1773	018752/0973
47246-US-NP	042933/417456	11/099,981	4/5/2005	9638	016278/0473
47246-US-PCT	042933/417457	11/887,973	10/4/2007	1008	019979/0535
47657-US-DIV	042933/417458	13/373,304	11/9/2011	5069	018287/0484-(Recorded in parent Appl. No. 11/453,268)
47780-US-PCT	042933/417459	12/225,528	10/7/2009	8931	023342/0334
48027-US-NP	042933/417460	11/069,749	2/28/2005	6588	016272/0733
48047-US-DIV	042933/417461	12/462,775	8/6/2009	1927	015433/0476-(Recorded in parent Appl. No. 10/903,489)
48096-US-NP	042933/417462	11/207,610	8/19/2005	6644	017096/0057
48246-US-PCT	042933/417463	11/791,508	2/21/2008	3083	020596/0232
48371-US-NP	042933/417464	10/958,671	10/4/2004	9747	015581/0976
48710-US-NP	042933/417466	11/331,433	1/11/2006	7226	017673/0016

Signature: \_\_\_\_\_

Thomas Arria

Date: \_\_\_\_\_

SCHEDULE A  
Revocation of Power of Attorney and New Power of Attorney  
By Assignee Nokia Corporation

Nokia Ref.	Attorney Docket No.	Appl. No.	Filing Date	Conf. No.	Assignment Reel/Frame
48785-US-NP	042933/417467	11/292,752	12/1/2005	3505	017304/0484
48785-US-PCT	042933/417468	11/720,973	8/26/2009	5247	023147/0996
49035-US-NP	042933/417469	11/342,261	1/26/2006	3080	017851/0828
49044-US-NP	042933/417470	11/177,250	7/8/2005	3584	017029/0571
49054-US-PCT	042933/417471	11/992,242	4/27/2009	6693	022639/0259
49481-US-NP	042933/417472	11/391,723	3/27/2006	4295	018051/0632
49486-US-NP	042933/417473	11/404,106	4/13/2006	8328	018111/0692
49784-US-PCT	042933/417474	11/921,533	6/22/2009	6581	022855/0520
49786-US-NP	042933/417475	11/181,690	7/13/2005	2855	017096/0050
49937-US-PCT	042933/417476	12/223,245	1/21/2011	6651	021445/0489
49952-US-PCT	042933/417477	12/086,667	4/5/2010	9174	024186/0809
50057-US-PCT	042933/417478	12/083,652	4/1/2009	1525	022485/0738
50121-US-PCT	042933/417479	11/989,376	1/23/2009	4927	020739/0576
50470-US-NP	042933/417480	11/594,030	11/6/2006	3615	018801/0532
50534-US-NP	042933/417481	11/359,963	2/21/2006	8066	017918/0673
50854-US-NP	042933/417482	11/256,667	10/21/2005	6431	017424/0892
50922-US-PCT	042933/417483	12/085,124	8/1/2009	6006	021202/0275
51033-US-NP	042933/417484	11/409,517	4/20/2006	1145	019330/0889
51489-US-NP	042933/417485	11/349,745	2/7/2006	6386	017843/0458
51653-US-DIV	042933/417486	12/803,094	6/18/2010	9944	018342/0334
51684-US-PCT	042933/417487	12/223,750	2/2/2009	2526	022232/0640
51739-US-NP	042933/417488	11/824,598	6/29/2007	2516	019724/0843
51932-US-NP	042933/417489	11/431,144	5/9/2006	5476	018068/0475
52483-US-NP	042933/417490	11/515,499	9/1/2006	5402	018600/0264
52612-US-CNT	042933/417491	12/930,669	1/11/2011	6002	018206/0174
45534-US-CNT	042933/417455	13/406,866	2/28/2012	5828	020977/0334-(Recorded in parent Appl. No. 11/918,690)
52713-US-PCT	042933/417492	12/311,303	11/3/2009	9037	022517/0636
52800-US-PCT[2]	042933/417493	12/227,730	9/25/2009	6218	023310/0961
52801-US-PCT	042933/417494	12/227,738	10/19/2009	1452	023420/0211
52805-US-PCT	042933/417495	12/227,728	3/10/2010	1352	024077/0158
52897-US-NP	042933/417496	11/453,568	6/14/2006	5299	018195/0814
53047-US-NP	042933/417497	11/436,202	5/16/2006	6336	018237/0891
53049-US-NP	042933/417498	11/424,042	6/14/2006	6876	018383/0347
53115-US-NP	042933/417499	11/486,856	7/14/2006	5380	018203/0800
53474-US-NP	042933/417500	11/523,140	9/19/2006	3973	018435/0142
55179-US-NP	042933/417501	11/978,207	10/26/2007	4846	020390/0651

Signature: \_\_\_\_\_

Thomas Arria

Date: \_\_\_\_\_

SCHEDULE A  
Revocation of Power of Attorney and New Power of Attorney  
By Assignee Nokia Corporation

Nokia Ref.	Attorney Docket No.	Appl. No.	Filing Date	Conf. No.	Assignment Reel/Frame
55879-US-NP	042933/417502	11/725,169	3/15/2007	3685	019426/0787
56029-US-CNT[2]	042933/417503	11/505,539	8/16/2006		009222/0221-(Recorded in parent Appl. No. 09/087,253) 012875/0306-(Recorded in parent Appl. No. 09/087,253) 018367/0245-(Recorded in parent Appl. No. 09/087,253) 019206/0370
56622-US-NP	042933/417504	12/008,703	1/10/2008	1734	020725/0704
57397-US-PCT	042933/417505	12/665,403	4/21/2010	1843	024224/0773
61143-US-NP	042933/417506	12/005,038	12/20/2007	2188	020628/0637
62320-US-NP	042933/417507	12/164,587	6/30/2008	1578	021589/0617
62513-US-NP	042933/417508	12/069,447	2/7/2008	6814	020885/0589
62700-US-NP	042933/417509	12/074,545	3/3/2008	7792	021093/0904
62893-US-NP	042933/417510	12/080,790	4/4/2008	5470	021065/0802
63627-US-NP	042933/417511	12/157,674	6/12/2008	8454	021144/0503
63751-US-NP	042933/417512	12/157,169	6/5/2008	6157	021256/0795
64173-US-NP	042933/417513	12/202,262	8/30/2008	1982	021826/0113
64305-US-PCT	042933/417514	12/736,515	10/13/2010	3344	025151/0453
64314-US-PCT	042933/417515	12/988,644	10/20/2010	3119	025199/0702
64427-US-NP	042933/417516	12/381,152	3/6/2009	1152	022651/0225
64674-US-NP	042933/417517	12/321,011	1/13/2009	5341	022480/0035
65129-US-NP	042933/417518	12/317,070	12/18/2008	9047	022424/0484
65148-US-CIP	042933/417519	12/586,995	9/29/2009	7159	024295/0480
65148-US-NP	042933/417520	12/319,933	1/13/2009	8750	022178/0424
65199-US-NP	042933/417521	12/319,968	1/13/2009	9683	022176/0254
65440-US-NP	042933/417522	12/321,371	1/15/2009	5608	022544/0784
66100-US-NP	042933/417523	12/339,386	12/19/2008	7112	022356/0080
66252-US-NP	042933/417524	12/470,855	5/22/2009	4689	023028/0764
66436-US-NP	042933/417525	12/339,526	12/19/2008	7382	022123/0964
66461-US-NP	042933/417526	12/459,086	6/25/2009	3014	022929/0709
66548-US-NP	042933/417527	12/387,313	4/29/2009	4729	023021/0950
66647-US-NP	042933/417528	12/339,351	12/19/2008	7051	022363/0880
67421-US-NP	042933/417529	12/386,472	4/16/2009	5746	022665/0750
69421-US-NP	042933/417530	12/459,022	6/24/2009	3022	023225/0445
71570-US-NP	042933/417531	12/806,672	8/17/2010	4424	025139/0227
71802-US-NP	042933/417533	12/858,905	8/18/2010	6863	025096/0652

Signature: \_\_\_\_\_

Thomas Arria

Date: \_\_\_\_\_

## LIMITED POWER OF ATTORNEY

that we, the undersigned, under the authority granted to each of us to sign jointly on behalf of

NOKIA CORPORATION  
Kellalahdentie 4  
02150 Espoo  
Finland

hereby authorize the following person

Thomas Arria  
Nokia Corporation  
5 Wayside Road  
01803 Burlington  
U.S.A.

Nokia Corporation  
P.O. Box 206  
FI-00045 NOKIA SF0100 Finland  
(Kellalahdentie 4, 02150 Espoo)

Tel: +358 7160 38000  
Fax: +358 7160 38206

Business Identity Code  
0112038-9, nokia

in his capacity as Senior IP Specialist, Patenting, to sign alone in the name of Nokia Corporation all the documents that relate to the filing, prosecution and registration of patent applications, as well as post-grant operations relating to patents granted based on such patent applications. Such documents may include without limitation case-specific Powers of Attorney, Assignment Deeds for assigning the ownership of an invention to Nokia, Novelty Declarations and Inventorship Declarations.


The rights granted under this Power of Attorney may not be transferred further, other than as specified above.

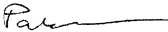
The authority granted by this Power of Attorney shall expire six (6) months from the date of execution.

Notwithstanding the foregoing, the authority granted by this Power of Attorney shall expire when the authorized person's employment with Nokia ends.

This Power of Attorney is duly signed on this day of January 1, 2012.

NOKIA CORPORATION

By:   
Name: Harri Honkasalo  
Title: Director,  
Legal and Intellectual Property

By:   
Name: Paul Melin  
Title: Vice President,  
Legal and Intellectual Property